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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,427	02/06/2004	Kouji Kubota	Q79788	2054
23373	7590	01/18/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			CAMERON, ERMA C	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/772,427

Applicant(s)

KUBOTA ET AL.

Examiner

Erma Cameron

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-7 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-7, 13-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

#### ***Election/Restrictions***

1. Applicant's election without traverse of Group I and species a) and d) in the reply filed on 12/12/2005 is acknowledged. Non-elected claims 8-11 have been canceled as have claims 2-3. Claim 12 is withdrawn as being drawn to a non-elected species. Claims 1, 4-7 and 13-14 have been examined.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. The rejection of Claims 1-7 and 13-14 are rejected under 35 U.S.C. 112, second paragraph, is withdrawn because of the amendment filed 12/12/2005

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-7 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukazawa (5346949) in light of the admitted state of the prior art or Yamaguchi et al (6472019).

'949 teaches applying a composition of fluoro-alkyl-acrylate, monomers that do not contain F (b), c) and d)), crosslinking monomers (5:1-6), a crosslinker (6:42-45), and a cationic water soluble polymer such as polyallylamine salt (2:20-57) to a fabric to make the fabric water and oil repellent (2:9-17). The cationic polymer provides an anchoring or fixative effect (5:43-59; 6:10-32). The cationic polymer may be added to the composition after the polymerization of the monomers (5:30-39), that is, mixed at the time of application. '949 teaches that the composition may be applied by various methods (6:46-49), but fails to teach the "exhaust" process (adjust pH, apply, steam, wash and dehydrate) of claim 1.

The admitted state of the prior art is that the "exhaust" method of application (page 1, lines 10-18 of the instant application) is known.

It would have been obvious to one of ordinary skill in the art to have used a well-known, conventional process such as the exhaust process to apply the composition of '949 with the reasoned expectation of success.

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'019 teaches applying a fluorinated composition by the exhaust process to textile to make the textile water and oil repellent (1:45-60) – adjust the pH to at most 7, or 4 (12:58-65), apply the composition, steam, wash and dehydrate.

It would have been obvious to one of ordinary skill in the art to have used the '019 exhaust process to apply the '949 composition because of the reasoned expectation of success when using a well-known, conventional application method such as the exhaust process.

In light of the 12/12/2005 Declaration, in which 10 and 15 mol% of methacrylic acid (as compound (b)) was used to demonstrate that the presence of this level of methacrylic acid was detrimental to water and oil repellency, it is the examiner's opinion that the applicant has not demonstrated that at the lower level of (b) compound, that is, 0.1 mol% , compound (b) is a material that "materially affects the basic and novel characteristics of the claimed composition", even though compound (b) must be present. See the discussion of the Declaration below.

The Declaration under 37 CFR 1.132 filed 12/12/2005 is insufficient to overcome the rejection of claims 1, 4-7 and 13-14 based upon 35 U.S.C. 103(a) as being unpatentable over Fukazawa (5346949) in light of the admitted state of the prior art or Yamaguchi et al (6472019). as set forth in the last Office action because:

the molar percentages used, namely 10 mol% and 15 mol%, do not cover the range of the Fukazawa (b) compound as used by Fukazawa, namely 0.1-15 mol%. In addition, the range of possible compounds corresponding to (b), "an alpha, beta-ethylenically unsaturated monomer

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containing carboxy group”, has not been used in the experiments of the Declaration. The applicant has studied only methacrylic acid at 10 and 15 mol%. This is not the scope of (b) compound as used by Fukazawa.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erna Cameron whose telephone number is 571-272-1416. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**ERMA CAMERON**  
**PRIMARY EXAMINER**

Erma Cameron  
Primary Examiner  
Art Unit 1762

January 15, 2006